

ipd4400malltsvdTES-10

Defense Information Infrastructure (DII)

Common Operating Environment (COE)

**Software Version Description (SVD) for the
Latitude-Longitude-Time (LLT)
Observation API (MALLT) Segment of the
Tactical Environmental Support System Next Century
[TESS(NC)]
Meteorology and Oceanography (METOC) Database**

Document Version 4.4

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1 SCOPE

1.1 Identification

This Software Version Description (SVD) describes the Latitude-Longitude-Time (LLT) Observation Application Program Interface (API) (MALLT) segment, Version 4.3 series, of the Tactical Environmental Support System Next Century [TESS(NC)] Meteorology and Oceanography (METOC) Database. The MALLT segment provides APIs for the storage and retrieval of METOC point observations. This software is designed to run under the Defense Information Infrastructure (DII) Common Operating Environment (COE) release 3.1 on a Hewlett-Packard computer running HP-UX 10.20 or a personal computer running the Microsoft Windows NT 4.0 operating system with Service Pack 3.

1.2 System Overview

The APIs described in this document form a portion of the METOC Database component of the TESS(NC) Program (Navy Integrated Tactical Environmental Subsystem (NITES) Version I). On 29 October 1996, the Oceanographer of the Navy issued a TESS Program Policy statement in letter 3140 Serial 961/6U570953, modifying the Program by calling for five seamless software versions that are DII COE compliant, preferably to level 5.

The five versions are:

- NITES Version I The local data fusion center and principal METOC analysis and forecast system (TESS(NC))
- NITES Version II The subsystem on the Joint Maritime Command Information System (JMCIS) or Global Command and Control System (GCCS) (NITES/Joint METOC Segment (JMS))
- NITES Version III The unclassified aviation forecast, briefing, and display subsystem tailored to Naval METOC shore activities (currently satisfied by the Meteorological Integrated Data Display System (MIDDS))
- NITES Version IV The Portable subsystem composed of independent Personal Computers (PCs)/workstations and modules for forecaster, satellite, communications, and Integrated Command, Control, Communications, Computer, and Intelligence Surveillance Reconnaissance (IC4ISR) functions (currently the Interim Mobile Oceanographic Support System (IMOSS))
- NITES Version V Foreign Military Sales (currently satisfied by the Allied Environmental Support System (AESS))

NITES I acquires and assimilates various METOC data for use by US Navy and Marine Corps weather forecasters and tactical planners. NITES I provides these users with METOC data, products, and applications necessary to support the warfighter in tactical operations and decision making. NITES I provides METOC data and products to NITES I and II applications, as well as non-TESS(NC) systems requiring METOC data, in a heterogeneous, networked computing environment.

The TESS(NC) Concept of Operations and system architecture require that the METOC Database be distributed both in terms of application access to METOC data and products and in terms of physical location of the data repositories. The organizational structure of the database is influenced by these requirements, and the components of this distributed database are described below.

In accordance with DII COE database concepts, the METOC Database is composed of six DII COE-compliant *shared database* segments. Associated with each shared database segment is an API segment. The segments are arranged by data type as follows:

| <u>Data Type</u> | <u>Data Segment</u> | <u>API Segment</u> |
|------------------------------------|----------------------------|---------------------------|
| Grid Fields | MDGRID | MAGRID |
| LLT Observations | MDLLT | MALLT |
| Textual Observations and Bulletins | MDTXT | MATXT |
| Remotely Sensed Data | MDREM | MAREM |
| Imagery | MDIMG | MAIMG |
| Climatology Data | MDCLIM | MACLIM |

A typical client-server installation is depicted in Figure 1-1 on the next page. This shows the shared database segments residing on a DII COE SHADE database server, with a NITES I or II client machine hosting the API segments. Communication between API segments and shared database segments is accomplished over the network using American National Standards Institute (ANSI)-standard Structured Query Language (SQL).

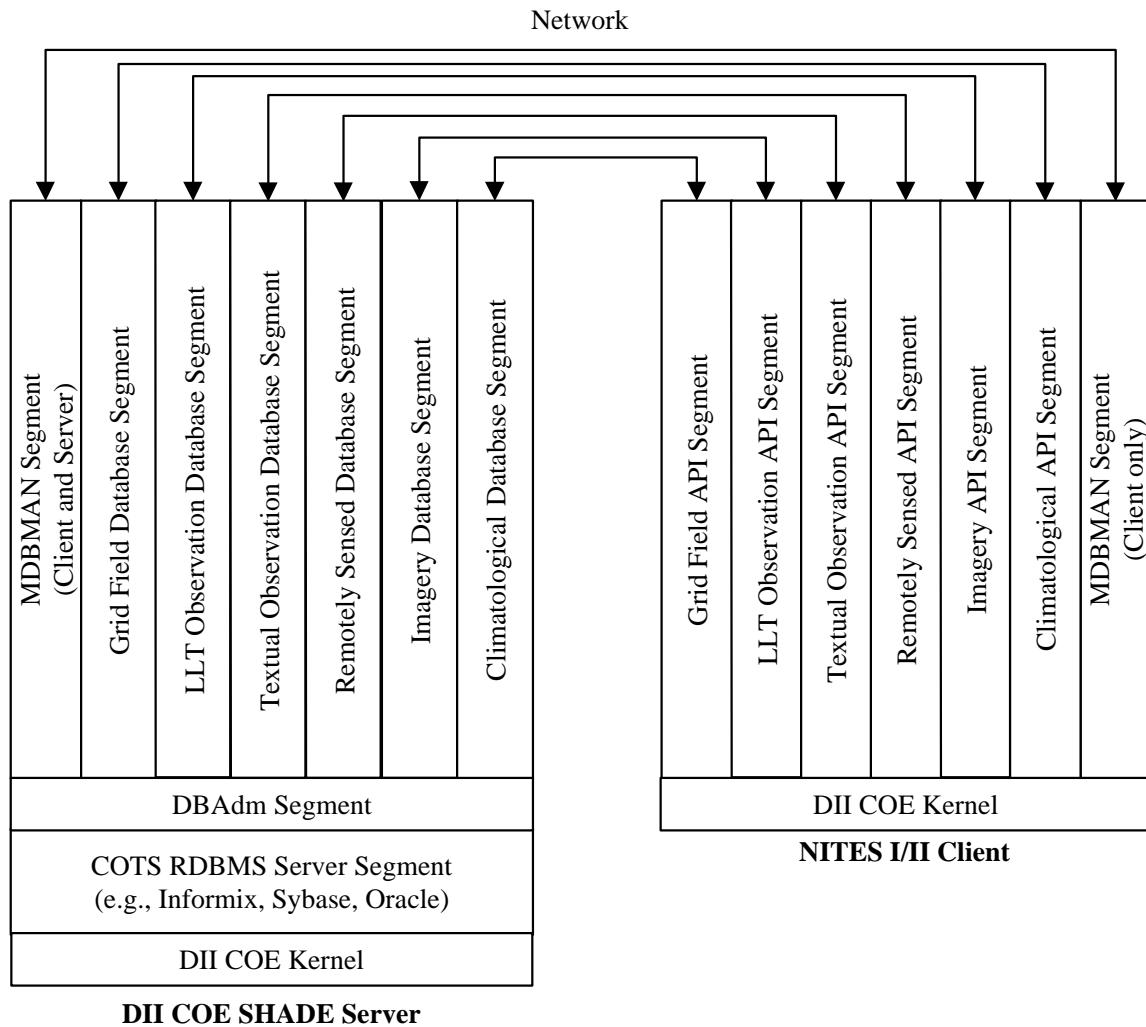


Figure 1-1. TESS(NC) METOC Database Conceptual Organization

The APIs in the MALLT segment deal with point observations. These include surface weather observations (hourlies, specials, synoptic observations, METAR reports Terminal Aerodrome Forecasts (TAFs), etc.), upper air observations (e.g., radiosonde reports, aircraft observations), and ocean soundings (bathythermograph, sound velocity profiles, etc.). For upper air and ocean soundings, the database may also store data derived from the original soundings in the form of upper air profiles and ocean profiles.

1.3 Product Information

1.3.1 Product Qualification

Test and Evaluation (T&E) of the software was performed at the Integration Performance Decisions (IPD) facility in Middletown, RI, prior to delivery of the software.

1.3.2 Product Restrictions

IPD's intellectual property rights to deliverables defined in this document are covered by the copyright license under the clause in DFARS 252.227-7013 (Nov. 1995).

1.3.3 Product Dependencies

The MALLT segment is hosted on the following hardware:

- Tactical Advanced Computer, TAC-3 (HP 750/755)/TAC-4 (HP J210)
- IBM-Compatible PC

The operating system requirements are:

- TAC-3/TAC-4: HP-UX 10.20
- PC: Windows NT 4.0 with Service Pack 3

The kernel requirements are:

- TAC-3/TAC-4: Kernel 3.0.1.0 with patches through P4
- PC: N/A

The following software must be properly installed prior to loading the MALLT segment:

- Appropriate operating system (as described above),
- Appropriate DII COE Kernel (as described above),
- DII COE Informix Connect Segment (INFXCN), version 1.0.1.0
- LLT Observation Database (MDLLT) Segment installed on a DII COE database server.

2 REFERENCED DOCUMENTS

2.1 Government Documents

| | |
|---|---|
| Unnumbered 30 September 1997 | <i>Database Design Description for the Tactical Environmental Support System/Next Century [TESS(NC)] Meteorological and Oceanographic (METOC) Database</i> , Space and Naval Warfare Systems Command, Environmental Systems Program Office (SPAWAR PMW-185), Washington, DC |
| ipd4200malltipTES-10 9 October 1998 | <i>Installation Procedures (IP) for the Latitude-Longitude-Time (LLT) Observation API (MALLT) Segment of the Tactical Environmental Support System Next Century [TESS(NC)] Meteorology and Oceanography (METOC) Database</i> |
| ipd4400malltrmTES-10 5 February 1999 | <i>Application Programming Interface Reference Manual (APIRM) for the Latitude-Longitude-Time (LLT) Observation API (MALLT) Segment of the Tactical Environmental Support System Next Century [TESS(NC)] Meteorology and Oceanography (METOC) Database</i> |
| ipd4400malltpmTES-10 5 February 1999 | <i>Programming Manual (PM) for the Latitude-Longitude-Time (LLT) Observation API (MALLT) Segment of the Tactical Environmental Support System Next Century [TESS(NC)] Meteorology and Oceanography (METOC) Database</i> |

2.2 Non-Government Documents

None.

3 VERSION DESCRIPTION

3.1 Inventory of Materials Released

All physical media and associated documentation for the MALLT segment are listed below.

- MALLT segment v4.3.0.0 (HP-UX) Installation Tape (4-mm Digital Audio Tape (DAT) cartridge for TAC-3/TAC-4 hardware)
- MALLT segment v4.3.0.0 (Windows NT) Installation diskette(s) (3.5" high-density diskette, IBM format for Windows NT 4.0 with Service Pack 3)
- MALLT segment v4.4 APIRM, dated 5 February 1999
- MALLT segment v4.4 PM, dated 5 February 1999
- MALLT segment v4.3 IP, dated 9 October 1998
- MALLT segment v4.4 SVD, dated 5 February 1999.

3.2 Inventory of Software Contents

A list of all executables and environment files delivered is contained in Appendix A of this document.

3.3 Changes Installed

A list of changes installed since the Preliminary (Developer) Release of the MALLT software is contained in Appendix B of this document.

3.4 Waivers

There are no waivers associated with this software.

3.5 Adaptation Data

There are no unique-to-site data contained in the MALLT 4.3.0.0 release.

3.6 Installation Instructions

The MALLT Segment v4.3 series IP referenced in Section 2 of this document provides comprehensive installation instructions for the MALLT segment. The fully installed segment occupies approximately 7.93 MB of disk space on HP-UX machines and 5 MB on Windows NT machines. On TAC-3/TAC-4 machines the software requires a minimum of 128 MB of RAM, with 192 MB recommended. On Windows NT machines, the software requires a minimum of 32 MB of RAM, with 128 MB recommended.

3.7 Possible Problems and Known Errors

Known problems and errors with MALLT software are listed in Appendix C of this document.

4 NOTES

4.1 Glossary of Acronyms

| | |
|--------|---|
| AESS | Allied Environmental Support System |
| ANSI | American National Standards Institute |
| API | Application Program Interface |
| APIRM | API Reference Manual |
| COE | Common Operating Environment |
| DAT | Digital Audio Tape |
| DII | Defense Information Infrastructure |
| GCCS | Global Command and Control System |
| IC4ISR | Integrated Command, Control, Communications, Computer, and Intelligence Surveillance Reconnaissance |
| IMOSS | Interim Mobile Oceanographic Support System |
| INFXCN | Informix Connect Segment |
| IP | Installation Procedures |
| IPD | Integrated Performance Decisions |
| JMCIS | Joint Maritime Command Information System |
| JMS | Joint METOC Segment |
| LLT | Latitude-Longitude-Time |
| MALLT | LLT Observation API Segment of the TESS(NC) METOC Database |
| MDLLT | LLT Observation Database Segment of the TESS(NC) METOC Database |
| METOC | Meteorology and Oceanography |

| | |
|-------|--|
| MIDDS | Meteorological Integrated Data Display System |
| NC | Next Century |
| NITES | Navy Integrated Tactical Environmental Subsystem |
| PC | Personal Computer |
| PM | Programming Manual |
| PTR | Program Trouble Report |
| SQL | Structured Query Language |
| SVD | Software Version Description |
| T&E | Test and Evaluation |
| TAF | Terminal Aerodrome Forecast |
| TESS | Tactical Environmental Support System |

Appendix A - List of Executables and Environment Files

A.1 File Structure for HP-UX Delivery

```
/h/MALLT:  
total 14  
drwxrwxr-x 2 sysadmin COE 1024 Feb 11 20:50 include  
drwxrwxr-x 2 sysadmin COE 1024 Feb 11 20:50 Scripts  
drwxrwxr-x 3 sysadmin COE 1024 Feb 11 20:50 man  
drwxr-xr-x 2 sysadmin COE 1024 Feb 11 20:50 bin  
drwxr-xr-x 2 sysadmin COE 1024 Feb 11 20:50 lib  
drwxrwxr-x 3 sysadmin COE 1024 Feb 11 20:50 Integ  
drwxrwxr-x 2 sysadmin COE 1024 Feb 11 23:02 SegDescrip  
  
/h/MALLT/include:  
total 146  
-r--r--- 1 sysadmin COE 3019 Feb 11 20:37 MALLT.h  
-r--r--- 1 sysadmin COE 633 Feb 11 20:37 MALLTAPI.h  
-r--r--- 1 sysadmin COE 1240 Feb 11 20:37 MALLTDef.h  
-r--r--- 1 sysadmin COE 2223 Feb 11 20:37 MALLTOBSproto.h  
-r--r--- 1 sysadmin COE 780 Feb 11 20:37 MALLTExp.h  
-r--r--- 1 sysadmin COE 158 Feb 11 20:37 MALLTPproto.h  
-r--r--- 1 sysadmin COE 5510 Feb 11 20:37 malltcommon.h  
-r--r--- 1 sysadmin COE 1319 Feb 11 20:37 MALLTdsmproto.h  
-r--r--- 1 sysadmin COE 21419 Feb 11 20:37 MALLTkrnlproto.h  
-r--r--- 1 sysadmin COE 1580 Feb 11 20:37 MALLTutilproto.h  
-r--r--- 1 sysadmin COE 1659 Feb 11 20:37 malltdsmgr.h  
-r--r--- 1 sysadmin COE 4280 Feb 11 20:37 malltoceanprofile.h  
-r--r--- 1 sysadmin COE 1504 Feb 11 20:37 mallterr.h  
-r--r--- 1 sysadmin COE 328 Feb 11 20:37 malltlmgr.h  
-r--r--- 1 sysadmin COE 3434 Feb 11 20:37 malltmacros.h  
-r--r--- 1 sysadmin COE 3822 Feb 11 20:37 malltmetarob.h  
-r--r--- 1 sysadmin COE 1878 Feb 11 20:37 malltoceanob.h  
-r--r--- 1 sysadmin COE 1645 Feb 11 20:37 malltsurfaceob.h  
-r--r--- 1 sysadmin COE 2119 Feb 11 20:37 malltremsns.h  
-r--r--- 1 sysadmin COE 1258 Feb 11 20:37 mallttypes.h  
-r--r--- 1 sysadmin COE 3827 Feb 11 20:37 malltupperairob.h  
  
/h/MALLT/Scripts:  
total 0  
  
/h/MALLT/man:  
total 2  
drwxrwxr-x 2 sysadmin COE 1024 Feb 11 20:50 man3  
  
/h/MALLT/man/man3:  
total 96  
-r--r--- 1 sysadmin COE 4422 Feb 11 20:37 malltcatalog.3  
-r--r--- 1 sysadmin COE 2305 Feb 11 20:37 malltconnect.3  
-r--r--- 1 sysadmin COE 2539 Feb 11 20:37 malltdeletebyid.3  
-r--r--- 1 sysadmin COE 2213 Feb 11 20:37 malltdisconnect.3  
-r--r--- 1 sysadmin COE 2591 Feb 11 20:37 malltgetbyid.3  
-r--r--- 1 sysadmin COE 1414 Feb 11 20:37 malltfreell.3  
-r--r--- 1 sysadmin COE 3245 Feb 11 20:37 malltgetbyquery.3  
-r--r--- 1 sysadmin COE 2098 Feb 11 20:37 malltingest.3  
-r--r--- 1 sysadmin COE 2277 Feb 11 20:37 malltremotedisconnect.3  
-r--r--- 1 sysadmin COE 2709 Feb 11 20:37 malltdeletebyquery.3
```

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| | | | | | | |
|------------|---|----------|-----|------|--------------|-------------------------|
| -r--r--r-- | 1 | sysadmin | COE | 3039 | Feb 11 20:37 | malltremoteconnect.3 |
| -r--r--r-- | 1 | sysadmin | COE | 2484 | Feb 11 20:37 | malltupdatebyid.3 |
| -r--r--r-- | 1 | sysadmin | COE | 2231 | Feb 11 20:37 | malltsetconnection.3 |
| -r--r--r-- | 1 | sysadmin | COE | 2479 | Feb 11 20:37 | malltgetstationbyid.3 |
| -r--r--r-- | 1 | sysadmin | COE | 3076 | Feb 11 20:37 | malltgetstationbyarea.3 |

/h/MALLT/bin:

| | | | | | | |
|------------|-----|----------|-----|--------|--------------|-------------------|
| total | 782 | | | | | |
| -rwxr-xr-x | 1 | sysadmin | COE | 20529 | Feb 11 20:37 | libMALLTUtils.sl |
| -rwxr-xr-x | 1 | sysadmin | COE | 308034 | Feb 11 20:38 | libMALLTKernel.sl |
| -rwxr-xr-x | 1 | sysadmin | COE | 20523 | Feb 11 20:38 | libMALLTDsmgr.sl |
| -rwxr-xr-x | 1 | sysadmin | COE | 36952 | Feb 11 20:38 | libMALLTAPI.sl |

/h/MALLT/lib:

| | | | | | | |
|------------|------|----------|-----|---------|--------------|------------------|
| total | 5776 | | | | | |
| -rwxr-xr-x | 1 | sysadmin | COE | 238836 | Feb 11 20:37 | libMALLTUtils.a |
| -rwxr-xr-x | 1 | sysadmin | COE | 2383938 | Feb 11 20:38 | libMALLTKernel.a |
| -rwxr-xr-x | 1 | sysadmin | COE | 98014 | Feb 11 20:38 | libMALLTDsmgr.a |
| -rwxr-xr-x | 1 | sysadmin | COE | 193752 | Feb 11 20:38 | libMALLTAPI.a |

/h/MALLT/Integ:

| | | | | | | |
|------------|---|----------|-----|------|--------------|-----------|
| total | 2 | | | | | |
| drwxrwxr-x | 3 | sysadmin | COE | 1024 | Feb 11 21:39 | TestSuite |

/h/MALLT/Integ/TestSuite:

| | | | | | | |
|------------|-------|----------|-----|--------|--------------|-----------------|
| total | 12944 | | | | | |
| -r-xr-xr-x | 1 | sysadmin | COE | 447671 | Feb 11 20:38 | MALLTlibIngest |
| -r-xr-xr-x | 1 | sysadmin | COE | 197056 | Feb 11 20:38 | MALLTs1Ingest |
| -r-xr-xr-x | 1 | sysadmin | COE | 365830 | Feb 11 20:39 | MALLTlibIngest2 |
| -r-xr-xr-x | 1 | sysadmin | COE | 115219 | Feb 11 20:39 | MALLTs1Ingest2 |
| -r-xr-xr-x | 1 | sysadmin | COE | 341209 | Feb 11 20:39 | MALLTlibUpdate |
| -r-xr-xr-x | 1 | sysadmin | COE | 341209 | Feb 11 20:39 | MALLTs1Update |
| -r-xr-xr-x | 1 | sysadmin | COE | 345298 | Feb 11 20:40 | MALLTlibDelete |
| -r-xr-xr-x | 1 | sysadmin | COE | 94686 | Feb 11 20:40 | MALLTs1Delete |
| -r-xr-xr-x | 1 | sysadmin | COE | 345299 | Feb 11 20:40 | MALLTlibGet |
| -r-xr-xr-x | 1 | sysadmin | COE | 94687 | Feb 11 20:40 | MALLTs1Get |
| -r-xr-xr-x | 1 | sysadmin | COE | 308307 | Feb 11 20:40 | MALLTlibGetTS |
| -r-xr-xr-x | 1 | sysadmin | COE | 57688 | Feb 11 20:40 | MALLTs1GetTS |
| -r-xr-xr-x | 1 | sysadmin | COE | 341202 | Feb 11 20:41 | MALLTlibgsba |
| -r-xr-xr-x | 1 | sysadmin | COE | 94686 | Feb 11 20:41 | MALLTs1gsba |
| -r-xr-xr-x | 1 | sysadmin | COE | 94686 | Feb 11 20:41 | MALLTs1gsbi |
| -r-xr-xr-x | 1 | sysadmin | COE | 341200 | Feb 11 20:41 | MALLTlibgsbi |
| -r-xr-xr-x | 1 | sysadmin | COE | 341198 | Feb 11 20:41 | MALLTlibBrowse |
| -r-xr-xr-x | 1 | sysadmin | COE | 90585 | Feb 11 20:41 | MALLTs1Browse |
| drwxrwxr-x | 11 | sysadmin | COE | 1024 | Feb 11 21:24 | TESTDATA |

/h/MALLT/Integ/TestSuite/TESTDATA:

| | | | | | | |
|------------|----|----------|-----|------|--------------|-------------|
| total | 18 | | | | | |
| drwxrwxr-x | 2 | sysadmin | COE | 1024 | Feb 11 20:50 | BROWSE |
| drwxrwxr-x | 2 | sysadmin | COE | 1024 | Feb 11 20:50 | DELETE |
| drwxrwxr-x | 2 | sysadmin | COE | 1024 | Feb 11 20:50 | GET |
| drwxrwxr-x | 2 | sysadmin | COE | 1024 | Feb 11 20:50 | INGEST |
| drwxrwxr-x | 9 | sysadmin | COE | 1024 | Feb 11 20:50 | INGEST2 |
| drwxrwxr-x | 2 | sysadmin | COE | 1024 | Feb 11 20:50 | STN_BY_ID |
| drwxrwxr-x | 2 | sysadmin | COE | 1024 | Feb 11 20:50 | STN_BY_AREA |

/h/MALLT/Integ/TestSuite/TESTDATA/BROWSE:

| | | | | | | |
|------------|----|----------|-----|-----|--------------|---------|
| total | 14 | | | | | |
| -r--r--r-- | 1 | sysadmin | COE | 213 | Feb 11 20:38 | aer.log |
| -r--r--r-- | 1 | sysadmin | COE | 212 | Feb 11 20:38 | ocn.log |
| -r--r--r-- | 1 | sysadmin | COE | 81 | Feb 11 20:38 | air.log |

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```
-r--r--r-- 1 sysadmin COE      81  Feb 11 20:38 pir.log
-r--r--r-- 1 sysadmin COE     210  Feb 11 20:38 uaw.log
-r--r--r-- 1 sysadmin COE     145  Feb 11 20:38 rkt.log
-r--r--r-- 1 sysadmin COE     341  Feb 11 20:38 uat.log
```

/h/MALLT/Integ/TestSuite/TESTDATA/DELETE:

```
total 2
-r--r--r-- 1 sysadmin COE      39  Feb 11 20:38 purge_all
```

/h/MALLT/Integ/TestSuite/TESTDATA/GET:

```
total 16
-r--r--r-- 1 sysadmin COE     188  Feb 11 20:38 get_rockShip_11
-r--r--r-- 1 sysadmin COE     145  Feb 11 20:38 get_airep_time
-r--r--r-- 1 sysadmin COE      94  Feb 11 20:38 get_99-00
-r--r--r-- 1 sysadmin COE    1633  Feb 11 20:38 get_all_types
-r--r--r-- 1 sysadmin COE      94  Feb 11 20:38 get_y2k
-r--r--r-- 1 sysadmin COE      39  Feb 11 20:38 get_all_wild
-r--r--r-- 1 sysadmin COE     145  Feb 11 20:38 get_pirep_TimWindow
```

/h/MALLT/Integ/TestSuite/TESTDATA/INGEST:

```
total 54
-r--xr-xr-x 1 sysadmin COE     121  Feb 11 20:38 airep.inp
-r--xr-xr-x 1 sysadmin COE   2772  Feb 11 20:38 all.log
-r--xr-xr-x 1 sysadmin COE      78  Feb 11 20:38 buoy.inp
-r--xr-xr-x 1 sysadmin COE      72  Feb 11 20:38 metar.inp
-r--xr-xr-x 1 sysadmin COE      81  Feb 11 20:38 op.inp
-r--r--r-- 1 sysadmin COE      67  Feb 11 20:38 pirep.inp
-r--xr-xr-x 1 sysadmin COE      52  Feb 11 20:38 rockFixd.inp
-r--xr-xr-x 1 sysadmin COE      39  Feb 11 20:38 rockShip.inp
-r--xr-xr-x 1 sysadmin COE   2435  Feb 11 20:38 run_all.log
-r--xr-xr-x 1 sysadmin COE     108  Feb 11 20:38 speci.inp
-r--xr-xr-x 1 sysadmin COE      83  Feb 11 20:38 bathy.inp
-r--xr-xr-x 1 sysadmin COE      61  Feb 11 20:38 synFixd.inp
-r--xr-xr-x 1 sysadmin COE      52  Feb 11 20:38 uaTmpFixd.inp
-r--xr-xr-x 1 sysadmin COE      80  Feb 11 20:38 synMobil.inp
-r--xr-xr-x 1 sysadmin COE      80  Feb 11 20:38 synShip.inp
-r--xr-xr-x 1 sysadmin COE     108  Feb 11 20:38 taf.inp
-r--xr-xr-x 1 sysadmin COE      79  Feb 11 20:38 uaTmpDrop.inp
-r--xr-xr-x 1 sysadmin COE      79  Feb 11 20:38 uaTmpProf.inp
-r--xr-xr-x 1 sysadmin COE      37  Feb 11 20:38 uaTmpShip.inp
-r--xr-xr-x 1 sysadmin COE      80  Feb 11 20:38 uaTmpMobil.inp
-r--xr-xr-x 1 sysadmin COE      26  Feb 11 20:38 uaWndFixd.inp
-r--xr-xr-x 1 sysadmin COE     82  Feb 11 20:38 uaWndShip.inp
-r--xr-xr-x 1 sysadmin COE     83  Feb 11 20:38 uaWndMobil.inp
```

/h/MALLT/Integ/TestSuite/TESTDATA/INGEST2:

```
total 18
-r--xr-xr-x 1 sysadmin COE   1005  Feb 11 20:38 TestAll
-r--xr-xr-x 1 sysadmin COE     456  Feb 11 20:38 TestAll.bat
drwxrwxr-x 2 sysadmin COE    1024  Feb 11 20:50 AIR
drwxrwxr-x 2 sysadmin COE    1024  Feb 11 20:50 AERO
drwxrwxr-x 2 sysadmin COE    1024  Feb 11 20:50 OCN
drwxrwxr-x 2 sysadmin COE    1024  Feb 11 20:50 UAT
drwxrwxr-x 2 sysadmin COE    1024  Feb 11 20:50 RKT
drwxrwxr-x 2 sysadmin COE    1024  Feb 11 20:50 SYN
drwxrwxr-x 2 sysadmin COE    1024  Feb 11 20:50 UAW
```

/h/MALLT/Integ/TestSuite/TESTDATA/INGEST2/AIR:

```
total 4
-r--xr-xr-x 1 sysadmin COE     382  Feb 11 20:38 airep.log
-r--xr-xr-x 1 sysadmin COE     574  Feb 11 20:38 pirep.log
```

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```
/h/MALLT/Integ/TestSuite/TESTDATA/INGEST2/AERO:  
total 10  
-r-xr-xr-x 1 sysadmin COE      960 Feb 11 20:38 metar.log  
-r-xr-xr-x 1 sysadmin COE     1262 Feb 11 20:38 speci.log  
-r-xr-xr-x 1 sysadmin COE     1597 Feb 11 20:38 taf.log  
  
/h/MALLT/Integ/TestSuite/TESTDATA/INGEST2/OCN:  
total 10  
-r-xr-xr-x 1 sysadmin COE      837 Feb 11 20:38 bathy.log  
-r-xr-xr-x 1 sysadmin COE      785 Feb 11 20:38 buoy.log  
-r-xr-xr-x 1 sysadmin COE     2050 Feb 11 20:38 profile.log  
  
/h/MALLT/Integ/TestSuite/TESTDATA/INGEST2/UAT:  
total 18  
-r-xr-xr-x 1 sysadmin COE     1134 Feb 11 20:38 fixed.log  
-r-xr-xr-x 1 sysadmin COE      779 Feb 11 20:38 drop.log  
-r-xr-xr-x 1 sysadmin COE     1201 Feb 11 20:38 mobile.log  
-r-xr-xr-x 1 sysadmin COE     1408 Feb 11 20:38 profile.log  
-r-xr-xr-x 1 sysadmin COE     1194 Feb 11 20:38 ship.log  
  
/h/MALLT/Integ/TestSuite/TESTDATA/INGEST2/RKT:  
total 4  
-r-xr-xr-x 1 sysadmin COE      760 Feb 11 20:38 fixed.log  
-r-xr-xr-x 1 sysadmin COE      612 Feb 11 20:38 ship.log  
  
/h/MALLT/Integ/TestSuite/TESTDATA/INGEST2/SYN:  
total 12  
-r-xr-xr-x 1 sysadmin COE     1375 Feb 11 20:38 fixed.log  
-r-xr-xr-x 1 sysadmin COE     1443 Feb 11 20:38 mobile.log  
-r-xr-xr-x 1 sysadmin COE     1440 Feb 11 20:38 ship.log  
  
/h/MALLT/Integ/TestSuite/TESTDATA/INGEST2/UAW:  
total 6  
-r-xr-xr-x 1 sysadmin COE      585 Feb 11 20:38 fixed.log  
-r-xr-xr-x 1 sysadmin COE      650 Feb 11 20:38 mobile.log  
-r-xr-xr-x 1 sysadmin COE      654 Feb 11 20:38 ship.log  
  
/h/MALLT/Integ/TestSuite/TESTDATA/STN_BY_ID:  
total 4  
-r--r--r-- 1 sysadmin COE      108 Feb 11 20:38 inp  
-r--r--r-- 1 sysadmin COE       71 Feb 11 20:38 inp2  
  
/h/MALLT/Integ/TestSuite/TESTDATA/STN_BY_AREA:  
total 18  
-r--r--r-- 1 sysadmin COE      116 Feb 11 20:38 inp1  
-r--r--r-- 1 sysadmin COE      113 Feb 11 20:38 inp3  
-r--r--r-- 1 sysadmin COE      115 Feb 11 20:38 inp4  
-r--r--r-- 1 sysadmin COE      111 Feb 11 20:38 inp2  
-r--r--r-- 1 sysadmin COE      115 Feb 11 20:38 inp5  
-r--r--r-- 1 sysadmin COE      115 Feb 11 20:38 inp9  
-r--r--r-- 1 sysadmin COE      115 Feb 11 20:38 inp6  
-r--r--r-- 1 sysadmin COE      115 Feb 11 20:38 inp7  
-r--r--r-- 1 sysadmin COE      116 Feb 11 20:38 inp8  
  
/h/MALLT/Integ/TestSuite/TESTDATA/temp:  
total 2  
-r--r--r-- 1 sysadmin other     188 Feb 11 21:28 get_rockShip_11  
  
/h/MALLT/Integ/TestSuite/TESTDATA/temp1:  
total 2
```

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```
-r--r--r-- 1 sysadmin other 39 Feb 11 21:28 get_all_wild
```

```
/h/MALLT/SegDescrip:
```

```
total 44
```

| | | | | | | |
|------------|---|------|-------|------|--------------|--------------|
| -rwxr-xr-x | 1 | 313 | COE | 168 | Feb 11 20:37 | DEINSTALL |
| -rw-r--r-- | 1 | 313 | COE | 550 | Feb 11 20:37 | SegName |
| -rw-r--r-- | 1 | 313 | COE | 183 | Feb 11 20:37 | VERSION |
| -rw-r--r-- | 1 | 313 | COE | 7730 | Feb 11 20:37 | ReleaseNotes |
| -rwxr-xr-x | 1 | 313 | COE | 261 | Feb 11 20:37 | PostInstall |
| -rw-rw-r-- | 1 | 313 | COE | 7068 | Feb 11 20:45 | FileAttrs |
| -rw-r--r-- | 1 | 313 | COE | 514 | Feb 11 20:45 | SegInfo |
| -rw-rw-rw- | 1 | root | COE | 123 | Feb 11 20:45 | Validated |
| -rw-rw-rw- | 1 | root | other | 135 | Feb 11 20:51 | Installed |

A.2 File Structure for Windows NT Delivery

```
\h\MALLT:  
total 0  
drwxr-xr-x 8 0 everyone 0 Feb 18 09:52 SegDescrip  
drwxr-xr-x 3 0 everyone 0 Feb 18 09:52 Integ  
drwxr-xr-x 10 0 everyone 0 Feb 18 09:53 bin  
drwxr-xr-x 6 0 everyone 0 Feb 18 09:53 lib  
drwxr-xr-x 3 0 everyone 0 Feb 18 09:53 man  
drwxr-xr-x 23 0 everyone 0 Feb 18 09:53 include  
-rw-r--r-- 1 0 everyone 0 Feb 18 09:54 test.txt  
  
\h\MALLT\SegDescrip:  
total 10  
-rwxr-xr-x 1 0 everyone 157 Oct 30 15:28 DEINSTALL.bat  
-rwxr-xr-x 1 0 everyone 144 Oct 30 15:28 PostInstall.bat  
-rw-r--r-- 1 0 everyone 550 Nov 6 14:48 SegName.txt  
-rw-r--r-- 1 0 everyone 262 Jan 24 16:47 SegInfo.txt  
-rw-r--r-- 1 0 everyone 183 Feb 12 16:48 VERSION.txt  
-rw-r--r-- 1 0 everyone 8779 Feb 12 16:48 ReleaseNotes.txt  
  
\h\MALLT\Integ:  
total 0  
drwxr-xr-x 21 0 everyone 0 Feb 18 09:52 TestSuite  
  
\h\MALLT\Integ\TestSuite:  
total 2007  
-rwxr-xr-x 1 0 everyone 114688 Feb 16 23:02 MALLTdllGet.exe  
-rwxr-xr-x 1 0 everyone 322560 Feb 16 23:03 MALLTlibGet.exe  
-rwxr-xr-x 1 0 everyone 218112 Feb 16 23:03 MALLTdllIngest.exe  
-rwxr-xr-x 1 0 everyone 425472 Feb 16 23:03 MALLTlibIngest.exe  
-rwxr-xr-x 1 0 everyone 130048 Feb 16 23:03 MALLTdllIngest2.exe  
-rwxr-xr-x 1 0 everyone 337408 Feb 16 23:04 MALLTlibIngest2.exe  
-rwxr-xr-x 1 0 everyone 114688 Feb 16 23:04 MALLTdllDelete.exe  
-rwxr-xr-x 1 0 everyone 322560 Feb 16 23:04 MALLTlibDelete.exe  
-rwxr-xr-x 1 0 everyone 112640 Feb 16 23:04 MALLTdllupdate.exe  
-rwxr-xr-x 1 0 everyone 320512 Feb 16 23:05 MALLTlibupdate.exe  
-rwxr-xr-x 1 0 everyone 86016 Feb 16 23:05 MALLTdllGetTS.exe  
-rwxr-xr-x 1 0 everyone 293888 Feb 16 23:05 MALLTlibGetTS.exe  
-rwxr-xr-x 1 0 everyone 113664 Feb 16 23:05 MALLTdllgsba.exe  
-rwxr-xr-x 1 0 everyone 321024 Feb 16 23:06 MALLTlibgsba.exe  
-rwxr-xr-x 1 0 everyone 113664 Feb 16 23:06 MALLTdllgsbi.exe  
-rwxr-xr-x 1 0 everyone 321024 Feb 16 23:06 MALLTlibgsbi.exe  
-rwxr-xr-x 1 0 everyone 112128 Feb 16 23:06 MALLTdllBrowse.exe  
-rwxr-xr-x 1 0 everyone 319488 Feb 16 23:07 MALLTlibBrowse.exe  
drwxr-xr-x 8 0 everyone 0 Feb 18 09:53 TestData  
  
\h\MALLT\Integ\TestSuite\ TestData:  
total 0  
drwxr-xr-x 3 0 everyone 0 Feb 18 09:53 Delete  
drwxr-xr-x 9 0 everyone 0 Feb 18 09:53 Get  
drwxr-xr-x 25 0 everyone 0 Feb 18 09:53 Ingest  
drwxr-xr-x 11 0 everyone 0 Feb 18 09:53 get_stn_by_area  
drwxr-xr-x 4 0 everyone 0 Feb 18 09:53 get_stn_by_id  
drwxr-xr-x 11 0 everyone 0 Feb 18 09:53 ingest2
```

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```
\h\MALLT\Integ\TestSuite\TestData\Delete:  
total 1  
-rw-r--r-- 1 0 everyone 39 Jan 24 16:37 purge_all  
  
\h\MALLT\Integ\TestSuite\TestData\Get:  
total 7  
-rw-r--r-- 1 0 everyone 94 Jan 24 16:38 get_y2k  
-rw-r--r-- 1 0 everyone 188 Jan 24 16:38 get_rockShip_ll  
-rw-r--r-- 1 0 everyone 39 Jan 24 16:38 get_all_wild  
-rw-r--r-- 1 0 everyone 145 Feb 1 22:48 get_pirep_TimWindow  
-rw-r--r-- 1 0 everyone 1633 Feb 1 22:48 get_all_types  
-rw-r--r-- 1 0 everyone 145 Feb 1 22:48 get_airep_time  
-rw-r--r-- 1 0 everyone 94 Feb 1 22:48 get_99-00  
  
\h\MALLT\Integ\TestSuite\TestData\Ingest:  
total 25  
-rw-r--r-- 1 0 everyone 121 May 11 1998 airep.inp  
-rw-r--r-- 1 0 everyone 2772 May 11 1998 all.log  
-rw-r--r-- 1 0 everyone 83 May 11 1998 bathy.inp  
-rw-r--r-- 1 0 everyone 78 May 11 1998 buoy.inp  
-rw-r--r-- 1 0 everyone 80 May 11 1998 synMobil.inp  
-rw-r--r-- 1 0 everyone 81 May 11 1998 op.inp  
-rw-r--r-- 1 0 everyone 2435 May 11 1998 run_all.log  
-rw-r--r-- 1 0 everyone 82 May 11 1998 uaWndShip.inp  
-rw-r--r-- 1 0 everyone 80 May 11 1998 synShip.inp  
-rw-r--r-- 1 0 everyone 79 May 11 1998 uaTmpDrop.inp  
-rw-r--r-- 1 0 everyone 80 May 11 1998 uaTmpMobil.inp  
-rw-r--r-- 1 0 everyone 79 May 11 1998 uaTmpProf.inp  
-rw-r--r-- 1 0 everyone 37 May 11 1998 uaTmpShip.inp  
-rw-r--r-- 1 0 everyone 83 May 11 1998 uaWndMobil.inp  
-rw-r--r-- 1 0 everyone 39 May 11 1998 rockShip.inp  
-rw-r--r-- 1 0 everyone 67 Oct 30 15:23 pirep.inp  
-rw-r--r-- 1 0 everyone 72 Nov 6 14:48 metar.inp  
-rw-r--r-- 1 0 everyone 108 Nov 6 14:48 speci.inp  
-rw-r--r-- 1 0 everyone 61 Nov 6 14:48 synFixd.inp  
-rw-r--r-- 1 0 everyone 52 Nov 6 14:48 rockFixd.inp  
-rw-r--r-- 1 0 everyone 52 Nov 6 14:48 uaTmpFixd.inp  
-rw-r--r-- 1 0 everyone 108 Nov 6 14:48 taf.inp  
-rw-r--r-- 1 0 everyone 26 Nov 6 14:48 uaWndFixd.inp  
  
\h\MALLT\Integ\TestSuite\TestData\get_stn_by_area:  
total 9  
-rw-r--r-- 1 0 everyone 115 Jan 24 16:39 inp9  
-rw-r--r-- 1 0 everyone 115 Jan 24 16:39 inp5  
-rw-r--r-- 1 0 everyone 115 Jan 24 16:39 inp6  
-rw-r--r-- 1 0 everyone 115 Jan 24 16:39 inp7  
-rw-r--r-- 1 0 everyone 116 Jan 24 16:39 inp8  
-rw-r--r-- 1 0 everyone 111 Jan 24 16:39 inp2  
-rw-r--r-- 1 0 everyone 113 Jan 24 16:39 inp3  
-rw-r--r-- 1 0 everyone 115 Jan 24 16:39 inp4  
-rw-r--r-- 1 0 everyone 116 Jan 24 16:39 inp1  
  
\h\MALLT\Integ\TestSuite\TestData\get_stn_by_id:  
total 2  
-rw-r--r-- 1 0 everyone 71 Jan 24 16:40 inp2  
-rw-r--r-- 1 0 everyone 108 Jan 24 16:40 inp  
  
\h\MALLT\Integ\TestSuite\TestData\ingest2:  
total 2  
-rw-r--r-- 1 0 everyone 1005 Nov 25 16:27 TestAll  
-rwxr-xr-x 1 0 everyone 456 Nov 25 16:27 TestAll.bat
```

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| | | | | | |
|------------|-----|----------|---|--------------|------|
| drwxr-xr-x | 5 0 | everyone | 0 | Feb 18 09:53 | AERO |
| drwxr-xr-x | 5 0 | everyone | 0 | Feb 18 09:53 | RKN |
| drwxr-xr-x | 5 0 | everyone | 0 | Feb 18 09:53 | SYN |
| drwxr-xr-x | 7 0 | everyone | 0 | Feb 18 09:53 | UAT |
| drwxr-xr-x | 5 0 | everyone | 0 | Feb 18 09:53 | UAW |
| drwxr-xr-x | 4 0 | everyone | 0 | Feb 18 09:53 | AIR |
| drwxr-xr-x | 5 0 | everyone | 0 | Feb 18 09:53 | OCN |

\h\MALLT\Integ\TestSuite\TestData\ingest2\AERO:

| | | | | | |
|------------|-----|----------|------|--------------|-----------|
| total | 3 | | | | |
| -rw-r--r-- | 1 0 | everyone | 1597 | Nov 25 16:27 | taf.log |
| -rw-r--r-- | 1 0 | everyone | 1262 | Nov 25 16:27 | speci.log |
| -rw-r--r-- | 1 0 | everyone | 960 | Nov 25 16:27 | metar.log |

\h\MALLT\Integ\TestSuite\TestData\ingest2\RKN:

| | | | | | |
|------------|-----|----------|------|--------------|-------------|
| total | 4 | | | | |
| -rw-r--r-- | 1 0 | everyone | 2050 | Nov 25 16:28 | profile.log |
| -rw-r--r-- | 1 0 | everyone | 785 | Nov 25 16:28 | buoy.log |
| -rw-r--r-- | 1 0 | everyone | 837 | Nov 25 16:28 | bathy.log |

\h\MALLT\Integ\TestSuite\TestData\ingest2\SYN:

| | | | | | |
|------------|-----|----------|------|--------------|------------|
| total | 3 | | | | |
| -rw-r--r-- | 1 0 | everyone | 1440 | Nov 25 16:29 | ship.log |
| -rw-r--r-- | 1 0 | everyone | 1443 | Nov 25 16:29 | mobile.log |
| -rw-r--r-- | 1 0 | everyone | 1375 | Nov 25 16:29 | fixed.log |

\h\MALLT\Integ\TestSuite\TestData\ingest2\UAT:

| | | | | | |
|------------|-----|----------|------|--------------|-------------|
| total | 5 | | | | |
| -rw-r--r-- | 1 0 | everyone | 1194 | Nov 25 16:29 | ship.log |
| -rw-r--r-- | 1 0 | everyone | 1201 | Nov 25 16:29 | mobile.log |
| -rw-r--r-- | 1 0 | everyone | 1408 | Nov 25 16:29 | profile.log |
| -rw-r--r-- | 1 0 | everyone | 1134 | Nov 25 16:29 | fixed.log |
| -rw-r--r-- | 1 0 | everyone | 779 | Nov 25 16:29 | drop.log |

\h\MALLT\Integ\TestSuite\TestData\ingest2\UAW:

| | | | | | |
|------------|-----|----------|-----|--------------|------------|
| total | 3 | | | | |
| -rw-r--r-- | 1 0 | everyone | 654 | Nov 25 16:29 | ship.log |
| -rw-r--r-- | 1 0 | everyone | 650 | Nov 25 16:29 | mobile.log |
| -rw-r--r-- | 1 0 | everyone | 585 | Nov 25 16:29 | fixed.log |

\h\MALLT\Integ\TestSuite\TestData\ingest2\AIR:

| | | | | | |
|------------|-----|----------|-----|--------------|-----------|
| total | 2 | | | | |
| -rw-r--r-- | 1 0 | everyone | 574 | Nov 25 16:27 | pirep.log |
| -rw-r--r-- | 1 0 | everyone | 382 | Nov 25 16:27 | airep.log |

\h\MALLT\Integ\TestSuite\TestData\ingest2\OCN:

| | | | | | |
|------------|-----|----------|------|--------------|-------------|
| total | 4 | | | | |
| -rw-r--r-- | 1 0 | everyone | 2050 | Nov 25 16:28 | profile.log |
| -rw-r--r-- | 1 0 | everyone | 785 | Nov 25 16:28 | buoy.log |
| -rw-r--r-- | 1 0 | everyone | 837 | Nov 25 16:28 | bathy.log |

\h\MALLT\bin:

| | | | | | |
|------------|-----|----------|--------|--------------|--------------------|
| total | 201 | | | | |
| -rw-r--r-- | 1 0 | everyone | 11686 | Feb 16 23:00 | libMALLTutils.lib |
| -rw-r--r-- | 1 0 | everyone | 6656 | Feb 16 23:00 | libMALLTutils.dll |
| -rw-r--r-- | 1 0 | everyone | 194560 | Feb 16 23:01 | libMALLTkernel.dll |
| -rw-r--r-- | 1 0 | everyone | 140670 | Feb 16 23:01 | libMALLTkernel.lib |
| -rw-r--r-- | 1 0 | everyone | 10240 | Feb 16 23:02 | libMALLTDsmgr.dll |
| -rw-r--r-- | 1 0 | everyone | 9754 | Feb 16 23:02 | libMALLTDsmgr.lib |
| -rw-r--r-- | 1 0 | everyone | 16896 | Feb 16 23:02 | libMALLTAPI.dll |
| -rw-r--r-- | 1 0 | everyone | 15416 | Feb 16 23:02 | libMALLTAPI.lib |

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```
\h\mallt\lib:  
total 178  
-rw-r--r-- 1 0 everyone 8486 Feb 16 23:00 libMALLTutils.lib  
-rw-r--r-- 1 0 everyone 318002 Feb 16 23:02 libMALLTkernel.lib  
-rw-r--r-- 1 0 everyone 11658 Feb 16 23:02 libMALLTDsmgr.lib  
-rw-r--r-- 1 0 everyone 21130 Feb 16 23:02 libMALLTAPI.lib  
  
\h\mallt\man:  
total 0  
drwxr-xr-x 17 0 everyone 0 Feb 18 09:53 man3  
  
\h\mallt\man\man3:  
total 30  
-rw-r--r-- 1 0 everyone 2484 Oct 30 15:29 malltupdatebyid.3  
-rw-r--r-- 1 0 everyone 2231 Oct 30 15:30 malltsetconnection.3  
-rw-r--r-- 1 0 everyone 2098 Oct 30 15:30 malltingest.3  
-rw-r--r-- 1 0 everyone 3039 Oct 30 15:30 malltremoteconnect.3  
-rw-r--r-- 1 0 everyone 2277 Oct 30 15:30 malltremotedisconnect.3  
-rw-r--r-- 1 0 everyone 2479 Oct 30 15:30 malltgetstationbyid.3  
-rw-r--r-- 1 0 everyone 3076 Oct 30 15:30 malltgetstationbyarea.3  
-rw-r--r-- 1 0 everyone 2591 Oct 30 15:30 malltgetbyid.3  
-rw-r--r-- 1 0 everyone 3245 Oct 30 15:30 malltgetbyquery.3  
-rw-r--r-- 1 0 everyone 1414 Oct 30 15:30 malltfreell.3  
-rw-r--r-- 1 0 everyone 2213 Oct 30 15:30 malltdisconnect.3  
-rw-r--r-- 1 0 everyone 2709 Oct 30 15:30 malltdeletebyquery.3  
-rw-r--r-- 1 0 everyone 2539 Oct 30 15:30 malltdeletebyid.3  
-rw-r--r-- 1 0 everyone 2305 Oct 30 15:30 malltconnect.3  
-rw-r--r-- 1 0 everyone 4422 Oct 30 15:30 malltcatalog.3  
  
\h\mallt\include:  
total 41  
-rw-r--r-- 1 0 everyone 158 May 11 1998 MALLTProto.h  
-rw-r--r-- 1 0 everyone 633 May 11 1998 MALLTAPI.h  
-rw-r--r-- 1 0 everyone 328 May 11 1998 malltllmgr.h  
-rw-r--r-- 1 0 everyone 2119 May 11 1998 malltremsns.h  
-rw-r--r-- 1 0 everyone 3019 Nov 6 14:49 MALLT.h  
-rw-r--r-- 1 0 everyone 1240 Nov 6 14:49 MALLTDef.h  
-rw-r--r-- 1 0 everyone 780 Nov 6 14:49 MALLTExp.h  
-rw-r--r-- 1 0 everyone 5510 Nov 6 14:49 malltcommon.h  
-rw-r--r-- 1 0 everyone 1504 Nov 6 14:49 mallterr.h  
-rw-r--r-- 1 0 everyone 1752 Nov 6 14:49 malltoceanob.h  
-rw-r--r-- 1 0 everyone 4280 Nov 6 14:49 malltoceanprofile.h  
-rw-r--r-- 1 0 everyone 1570 Nov 6 14:49 malltsurfaceob.h  
-rw-r--r-- 1 0 everyone 1258 Nov 6 14:49 mallttypes.h  
-rw-r--r-- 1 0 everyone 3827 Nov 6 14:49 malltupperairob.h  
-rw-r--r-- 1 0 everyone 3434 Jan 24 16:48 malltmacros.h  
-rw-r--r-- 1 0 everyone 21419 Jan 24 16:48 MALLTkrnlproto.h  
-rw-r--r-- 1 0 everyone 1659 Jan 24 16:48 malltdsmgr.h  
-rw-r--r-- 1 0 everyone 1580 Jan 24 16:48 MALLTutlproto.h  
-rw-r--r-- 1 0 everyone 2223 Jan 24 16:48 MALLTOBSproto.h  
-rw-r--r-- 1 0 everyone 1319 Jan 24 16:48 MALLTdsmpromo.h  
-rw-r--r-- 1 0 everyone 3822 Feb 12 16:40 malltmetarob.h
```

Appendix B - Changes/Updates Since Preliminary Release

This release made the following changes:

| Pri | PTR # | Summary |
|-----|---------|---|
| | XL00004 | Clouds need to be handled in four groups instead of three. |
| | XL00005 | The following station IDs were not in the database. |
| 1 | 168 | When executing an interactive ingest, seven types and subtypes produce errors. |
| 1 | 172 | When executing get_stn_by_area, I receive an application error. |
| 1 | 173 | The get test driver does not function properly. |
| 2 | 153 | When one radiosonde observation (with upper air temperature data) is ingested into the LLT database, no others can be ingested. |
| 2 | 161 | Already in transaction error occurs when doing a delete by ID. |
| 2 | 169 | Test driver for ingest does not support the type 2 and subtype 11. |
| 2 | 170 | ASW Domain is not supported in current implementation of TEDS. |
| 2 | 225 | Memory not deallocated on disconnect. |
| 3 | 164 | Catalog request returning table names with trailing blanks. |
| 3 | 178 | Sea Water Temperature (rsSst) field of Synoptic Summary Structure is not being saved to TEDS database. |
| 3 | 195 | Need to add station elevation to fixed station reports. |
| 3 | 197 | Buoy needs outer join. |

| Pri | PTR # | Summary |
|-----|-------|--|
| 3 | 236 | 56K memory leak in MALLT. |
| 3 | 246 | Need to be able to store 4qps per METAR instead of three. |
| 3 | 250 | On Catalog call the receipt time does not seem to be filtering out data. |
| 3 | 261 | Complete Y2K testing. |
| 3 | 274 | Return the number of records purged from the MALLTDeletebyQuery function. |
| 3 | 282 | Short int is not big enough to handle horizontal visibility in meters. |
| 3 | 295 | Dead Locks and other table contention problems (SQLERROR -233 and 270) occurring when running with multiple decodes. |
| 3 | 296 | Make Test drivers UI menu driven. |
| 5 | 306 | The delete test driver does not return a good number deleted. |

Appendix C - Known Problems and Errors

| Pri | PTR # | Summary |
|-----|-------|--|
| 2 | 289 | Error inserting clouds when doing a restore in MDBMAN. |
| 3 | 73 | Ship speed and direction need to be added to bathy, buoy, and synoptic reports. |
| 3 | 247 | Possibility that only a trend may be part of a TAF forecast. |
| 3 | 248 | Some targets are not used consistently on NT and HP makefiles in MALLT. |
| 3 | 275 | Add functionality to count records by query. |
| 3 | 280 | METAR Elevation is not filled in correctly. |
| 3 | 281 | Fill in the WMO station ID during METAR ingest. |
| 3 | 293 | Upper air purging is not working completely correctly. |
| 3 | 297 | MALLTDisconnect does not include MALLTSetConnection call. |
| 4 | 292 | Error message purging data. |
| 4 | 294 | METAR retrieval too slow. |
| 4 | 304 | Merged Observations contain redundant entries. |
| 5 | 27 | Change data type of fields to floats where conversions can be made or data may be derived. |

Detailed Program Trouble Reports (PTRs) are contained on the following pages.

Program Trouble Report

Report Number: 289

Originator Information

| | | | |
|-------------|-----------------|-----------|----------|
| Author: | Robert Lincourt | Created: | 12/16/98 |
| Site: | NP | Employer: | Ned Hole |
| Phone: | | E-mail: | rlincour |
| Cross Ref#: | | | |

System Information

| | | | |
|---------------|---------------------|------------------|---------------------|
| Priority 2 | Category Problem | Type Software | Status Duplicate |
|---------------|---------------------|------------------|---------------------|

Open Systems

| | | | |
|-------------------------------|-----------------------|--------------------------------|-------------------------|
| System TESS(NC)-LLT | Version 4.3 | Platform SOLARIS 2.6 | Date 16/12/98 |
|-------------------------------|-----------------------|--------------------------------|-------------------------|

Modules: MALLT

Module Functions or other Identifying Keywords:

Description of the Problem

One Line Problem Summary:
Error inserting clouds when doing a restore in MDBMAN.

Steps Required to Duplicate the Problem:

Repeatable? Yes **Likelihood of Occurrence:**

Problem Description:
Error inserting clouds when doing a restore in MDBMAN.

Originator's Recommendation:

PTR Assignment (if known)

Responsible Engineer(s):

Denise Reniere

Verified By: Rob Lincourt Date Verified: 12/15/98

Program Trouble Report

Report Number: 73

Originator Information

| | | | |
|-------------|-------------------|-----------|----------|
| Author: | Michael Sacauskis | Created: | 05/06/98 |
| Site: | MC | Employer: | IPD |
| Phone: | 408.375.2693 | E-mail: | msacausk |
| Cross Ref#: | | | |

System Information

| Priority | Category | Type | Status |
|----------|----------|----------|--------|
| 3 | Problem | Software | New |

Open Systems

| System | Version | Platform | Date |
|--------------|---------|-----------------------------|----------|
| TESS(NC)-LLT | 4.1 | HPUX 1020 and NT 4.0 (both) | 05/06/98 |
| TESS(NC)-LLT | 4.1 | HPUX 1020 and NT 4.0 (both) | 05/06/98 |

Modules: MDLLT
MALLT

Module Functions or other Identifying Keywords:

Description of the Problem

One Line Problem Summary:
Ship speed and direction need to be added to bathy, buoy and synoptic reports.

Steps Required to Duplicate the Problem:

Repeatable? Yes

Likelihood of Occurrence:

Problem Description:

Schema for buoy, baths, and ship synoptic reports need ship speed and direction added. API software needs to modified to retrieve fields as well.

Originator's Recommendation:
Add fields to appropriate table definitions so that fields make code mods to store, retrieve and update the fields in the API.

PTR Assignment (if known)

Responsible Engineer(s):

Michael Sacauskis

Verified By:

Date Verified:

Program Trouble Report

Report Number: 247

Originator Information

| | | | |
|-------------|-------------------|-----------|----------|
| Author: | Michael Sacauskis | Created: | 11/09/98 |
| Site: | MC | Employer: | |
| Phone: | (831) 656-4777 | E-mail: | msacausk |
| Cross Ref#: | | | |

System Information

| Priority | Category | Type | Status |
|----------|----------|----------|--------|
| 3 | Problem | Software | New |

Open Systems

| System | Version | Platform | Date |
|--------------|---------|-----------------------------|----------|
| TESS(NC)-LLT | 4.2 | HPUX 1020 and NT 4.0 (both) | 11/09/98 |

Modules: MALLT

Module Functions or other Identifying Keywords:

Description of the Problem

One Line Problem Summary:

Possibility that only a trend may be part of a TAF forecast.

Steps Required to Duplicate the Problem:

Repeatable? Yes

Likelihood of Occurrence:

Problem Description:

MALLT currently assumes to a general forecast and a trend will be part of a TAF. However it is possible that only a trend may be part of a forecast.

Originator's Recommendation:

Set up store such that trend only is valid.

PTR Assignment (if known)

Responsible Engineer(s):

Sacauskis

Verified By:

Date Verified:

Program Trouble Report

Report Number: 248

Originator Information

| | | | |
|-------------|-------------------|-----------|----------|
| Author: | Michael Sacauskis | Created: | 11/09/98 |
| Site: | MC | Employer: | |
| Phone: | (831) 656-4777 | E-mail: | msacausk |
| Cross Ref#: | | | |

System Information

| Priority | Category | Type | Status |
|----------|----------|----------|--------|
| 3 | Problem | Software | New |

Open Systems

| System | Version | Platform | Date |
|--------------|---------|-----------------------------|----------|
| TESS(NC)-LLT | 4.2 | HPUX 1020 and NT 4.0 (both) | 11/09/98 |

Modules: MALLT

Module Functions or other Identifying Keywords: Get, makefiles, to, conform, to, other, segments, makefiles.

Description of the Problem

One Line Problem Summary:
Some targets are not used consistently on nt and hp makefiles in MALLT.

Steps Required to Duplicate the Problem:

Repeatable? Yes **Likelihood of Occurrence:**

Problem Description:

Originator's Recommendation:

PTR Assignment (if known)

Responsible Engineer(s):

Sacauskis

Verified By:

Date Verified:

Program Trouble Report

Report Number: 275

Originator Information

| | | | |
|-------------|-----------------|-----------|----------|
| Author: | Joseph Kralicky | Created: | 12/03/98 |
| Site: | NP | Employer: | |
| Phone: | | E-mail: | jkralick |
| Cross Ref#: | | | |

System Information

| Priority | Category | Type | Status |
|----------|-------------|----------|----------|
| 3 | Enhancement | Software | Assigned |

Open Systems

| System | Version | Platform | Date |
|--------------|---------|---|----------|
| TESS(NC)-LLT | 4.3 | HPUX 1020 and NT 4.0 and SOLARIS 2.6(all) | 12/03/98 |

Modules: MALLT

Module Functions or other Identifying Keywords:

Description of the Problem

One Line Problem Summary:
Add functionality to count records by query

Steps Required to Duplicate the Problem:

Repeatable? Yes **Likelihood of Occurrence:**

Problem Description:
MDBMAN needs to be able to count records by query to enhance performance.

Originator's Recommendation:
Add GetCatalogCountByQuery and GetBrowseCountByQuery using the same query structures as the catalog and browse retrieve functions. These functions should return an integer.
These functions will be used for example when the user is doing an MDBMAN Browse, it will first check how many records will be browsed and alert the user if there are too many. The user will then hopefully refine the query to be a smaller set of data.

PTR Assignment (if known)

Responsible Engineer(s):

mike sacauskis

renee jones

Verified By:

Date Verified:

Program Trouble Report

Report Number: 280

Originator Information

| | | | |
|-------------|---------------|-----------|----------|
| Author: | Michael Frost | Created: | 12/04/98 |
| Site: | MC | Employer: | |
| Phone: | | E-mail: | mfrost |
| Cross Ref#: | | | |

System Information

| Priority | Category | Type | Status |
|----------|----------|----------|--------|
| 3 | Problem | Software | New |

Open Systems

| System | Version | Platform | Date |
|--------------|---------|---|----------|
| TESS(NC)-LLT | 4.3 | HPUX 1020 and NT 4.0 and SOLARIS 2.6(all) | 12/04/98 |

Modules: MALLT

Module Functions or other Identifying Keywords:

Description of the Problem

One Line Problem Summary:
METAR Elevation not filled in correctly

Steps Required to Duplicate the Problem:
Ingest METAR (From message) and Retrieve it
Repeatable? Yes **Likelihood of Occurrence:**

Problem Description:
METAR elevation not filled in correctly. Currently all METAR elevations have the value 6.8378753e35. This should be filled in when LLT maps the call sign to the lat/lon.

Originator's Recommendation:

Fill in the elevation

PTR Assignment (if known)

Responsible Engineer(s):

Verified By: **Date Verified:**

Program Trouble Report

Report Number: 281

Originator Information

| | | | |
|-------------|---------------|-----------|----------|
| Author: | Michael Frost | Created: | 12/04/98 |
| Site: | MC | Employer: | |
| Phone: | | E-mail: | mfrost |
| Cross Ref#: | | | |

System Information

| Priority | Category | Type | Status |
|----------|-------------|----------|--------|
| 3 | Enhancement | Software | New |

Open Systems

| System | Version | Platform | Date |
|--------------|---------|---|----------|
| TESS(NC)-LLT | 4.3 | HPUX 1020 and NT 4.0 and SOLARIS 2.6(all) | 12/04/98 |

Modules: MALLT

Module Functions or other Identifying Keywords:

Description of the Problem

One Line Problem Summary:
Fill in the WMO station ID during METAR ingest

Steps Required to Duplicate the Problem:

Repeatable? Yes **Likelihood of Occurrence:**

Problem Description:

Fill in the WMO station ID during METAR ingest. Use the ICAO string as a look up into the stationID table to access WMO ID. Set the WMO ID inside the METAR OB structure.

Originator's Recommendation:

Make it so.

PTR Assignment (if known)

Responsible Engineer(s):

Mike Sacauskis

Ned Hole

Verified By:

Date Verified:

Program Trouble Report

Report Number: 293

Originator Information

| | | | |
|-------------|---------------|-----------|----------|
| Author: | Michael Frost | Created: | 12/18/98 |
| Site: | MC | Employer: | |
| Phone: | | E-mail: | mfrost |
| Cross Ref#: | | | |

System Information

| Priority | Category | Type | Status |
|----------|----------|----------|--------|
| 3 | Problem | Software | |

Open Systems

| System | Version | Platform | Date |
|--------------|---------|---|----------|
| TESS(NC)-LLT | 4.3 | HPUX 1020 and NT 4.0 and SOLARIS 2.6(all) | 12/18/98 |

Modules: MALLT

Module Functions or other Identifying Keywords:

Description of the Problem

One Line Problem Summary:
Upper air purging not working completely correct

Steps Required to Duplicate the Problem:
Insert ua reports from raw message (or well planned driver that mimics this) and retrieve and view the results
Repeatable? Yes **Likelihood of Occurrence:**

Problem Description:

All of the upper air levels are not being merged correctly. Some levels are out of order

Originator's Recommendation:

PTR Assignment (if known)

Responsible Engineer(s):

Ned Hole
Denise Reniere
Verified By:

Date Verified:

Program Trouble Report

Report Number: 297

Originator Information

| | | | |
|-------------|-----------------------|-----------|----------|
| Author: | Denise Reniere | Created: | 12/30/98 |
| Site: | NP | Employer: | |
| Phone: | 401-849-5952 ext.3334 | E-mail: | DReniere |
| Cross Ref#: | | | |

System Information

| | | | |
|---------------|---------------------|------------------|---------------|
| Priority 3 | Category Problem | Type Software | Status New |
|---------------|---------------------|------------------|---------------|

Open Systems

| | | | |
|-------------------------------|-----------------------|--|-------------------------|
| System TESS(NC)-LLT | Version 4.3 | Platform HPUX 1020 and NT 4.0 and SOLARIS 2.6(all) | Date 12/30/98 |
|-------------------------------|-----------------------|--|-------------------------|

Modules: MALLT

Module Functions or other Identifying Keywords:

Description of the Problem

One Line Problem Summary:
MALLTDisconnect does not include MALLTSetConnection call

Steps Required to Duplicate the Problem:
Connect to more than one METOC DB, the first one being MDLLT ... then disconnect from each... the MALLTDisconnect will fail since it did not access the correct database for its queries.

Repeatable? Yes **Likelihood of Occurrence:**

Problem Description:
Disconnecting from MDLLT database fails when application has multiple connections open.

Originator's Recommendation:
Add MALLTSetConnection call to the MALLTDisconnect API

PTR Assignment (if known)

Responsible Engineer(s):

Verified By:

Date Verified:

Program Trouble Report

Report Number: 292

Originator Information

| | | | |
|-------------|---------------|-----------|----------|
| Author: | Michael Frost | Created: | 12/18/98 |
| Site: | MC | Employer: | |
| Phone: | | E-mail: | mfrost |
| Cross Ref#: | | | |

System Information

| Priority | Category | Type | Status |
|----------|----------|----------|--------|
| 4 | Problem | Software | New |

Open Systems

| System | Version | Platform | Date |
|--------------|---------|---|----------|
| TESS(NC)-LLT | 4.3 | HPUX 1020 and NT 4.0 and SOLARIS 2.6(all) | 12/18/98 |

Modules: MALLT

Module Functions or other Identifying Keywords:

Description of the Problem

One Line Problem Summary:
Error message purging data

Steps Required to Duplicate the Problem:
Purge from a LLT db that is very populated. Soundings table with 20,000 rows would do it.

Repeatable? Yes **Likelihood of Occurrence:**

Problem Description:
Getting error messages while purging from LLT. Long Transaction.

Originator's Recommendation:

Make it so no error?>?..

PTR Assignment (if known)

Responsible Engineer(s):

Ned Hole
Denise Reniere

Verified By:

Date Verified:

Program Trouble Report

Report Number: 294

Originator Information

| | | | |
|-------------|---------------|-----------|----------|
| Author: | Michael Frost | Created: | 12/29/98 |
| Site: | MC | Employer: | |
| Phone: | | E-mail: | mfrost |
| Cross Ref#: | | | |

System Information

| Priority | Category | Type | Status |
|----------|----------|----------|--------|
| 4 | Problem | Software | |

Open Systems

| System | Version | Platform | Date |
|--------------|---------|---|----------|
| TESS(NC)-LLT | 4.3 | HPUX 1020 and NT 4.0 and SOLARIS 2.6(all) | 12/29/98 |

Modules: MALLT,MDLLT

Module Functions or other Identifying Keywords:

Description of the Problem

One Line Problem Summary:
METAR retrieval too slow

Steps Required to Duplicate the Problem:
Insert lots of METARS, then retrieve lots of METARS.
Repeatable? Yes Likelihood of Occurrence:

Problem Description:
METAR retrieval too slow

Originator's Recommendation:

PTR Assignment (if known)

Responsible Engineer(s):

Ned Hole
Denise Reniere

Verified By:

Date Verified:

Program Trouble Report

Report Number: 304

Originator Information

| | | | |
|-------------|---------------------|-----------|----------|
| Author: | Karen Augustus | Created: | 02/08/99 |
| Site: | NP | Employer: | |
| Phone: | (401)849-5952 x3466 | E-mail: | kaugustu |
| Cross Ref#: | | | |

System Information

| Priority | Category | Type | Status |
|----------|----------|----------|--------|
| 4 | Problem | Software | New |

Open Systems

| System | Version | Platform | Date |
|--------------|---------|-----------|----------|
| TESS(NC)-LLT | 4.0 | HPUX 1020 | 02/08/99 |

Modules: MALLT

Module Functions or other Identifying Keywords:

Description of the Problem

One Line Problem Summary:
Merged Observations contain redundant entries

Steps Required to Duplicate the Problem:

Repeatable? Yes

Likelihood of Occurrence:

Problem Description:

Added two of the same observations into TEDS, copied a COMEDS file to /h/data/global/N2PAR/data/DATAING/MEDS for ipp decoding into TEDS, once decoded copied the same file again for TEDS ingest. The observation is merged and duplicate entries are displayed. Only one entry is displayed in the data base but the second file is appended to the first.

Originator's Recommendation:

PTR Assignment (if known)

Responsible Engineer(s):

Mike Frost
Mike Sacauskis
Chris Raulli
Rob Lincourt

Verified By:

Date Verified:

Program Trouble Report

Report Number: 27

Originator Information

| | | | |
|-------------|-------------------|-----------|----------|
| Author: | Michael Sacauskis | Created: | 03/02/98 |
| Site: | MC | Employer: | IPD |
| Phone: | 860.599.3886 x | E-mail: | msacausk |
| Cross Ref#: | | | |

System Information

| Priority | Category | Type | Status |
|----------|-------------|----------|----------|
| 5 | Enhancement | Software | Assigned |

Open Systems

| System | Version | Platform | Date |
|--------------|---------|-----------------------------|----------|
| TESS(NC)-LLT | 1.0 | HPUX 1020 and NT 4.0 (both) | 03/02/98 |

Modules: MALLT

Module Functions or other Identifying Keywords:

Description of the Problem

One Line Problem Summary:
Change data type of fields to floats where conversions can be made or data may be derived.

Steps Required to Duplicate the Problem:

Repeatable? Yes

Likelihood of Occurrence:

Problem Description:
Change data type of fields to floats where conversions can be made or data may be derived.

Originator's Recommendation:
Make appropriate changes to data type fields to floats.

PTR Assignment (if known)

Responsible Engineer(s):

Mike Sacauskis

Verified By:

Mike Sacauskis

Date Verified:

03/02/98